Corporate social responsibility and financial performance

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Abstract: This article will support on the econometrics of panel data to analyse the influence of corporate social responsibility (CSR) on the financial performance measured by several indicators. From a sample of 20 firms listed on the stock exchange of Casablanca between 2007 and 2010. Our research found a negative and significant impact of the CSR on financial performance. The negative influence is important in large companies, which means it is a mediating factor.

Keywords: corporate social responsibility; CSR; financial performance; panel data; unobservable heterogeneity.


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1 Introduction

In an environment where consumers are becoming more discerning in where businesses are in the obligation to adopt a mode of management more participatory and take into account the concerns of a multitude of stakeholders. In effect the shareholder model, liberal who proclaimed the maximisation of shareholder value, considered that the ultimate purpose of any profit-making organisation is to ensure the interests of the introducers of financial resources.

The emergence of the concept of sustainable development, which is part of a participatory approach to all components of the socio-economic environment, has only exacerbated the expectations with regard to a social responsibility, see societal of the firm.
The response of the latter to all its expectations is made by the corporate social responsibility (CSR).\textsuperscript{1}

The defenders of this approach, who are the supporters of the famous theory of stakeholders, support their position by the tracks of success which can open to any company which ensures the satisfaction of its stakeholders (Freeman, 1984; Cornell and Shapiro, 1987). These authors consider that adopting an approach societally responsible, the company improved its brand image, source of economic performance. The commitment of the company in the activities of a social nature, can be a source of costs which reduces its competitiveness and adversely affect its financial performance (Friedman, 1970). In the same perspective, Williamson et al. (1997) consider that any expense incurred in the context of an activity of a social character, or having for purpose the protection of the natural environment, is likely to serve as the leaders of pretext to justify a bad financial performance could be due to an irrational management.

Other authors condone the absence of any association between CSR and financial performance of the company (McWilliams and Siegel, 2001; Hing, 2003; Preston and O’Bannon, 1997) and consider that, in balance, gains induced by the social commitment are totally offset by the related expenses.

Empirical studies have not allowed the supremacy of one of the theoretical views of the impact of CSR on financial performance. These are still marred by methodological limitations regarding the choice of good proxies of the degree of societal involvement of the company, or of the financial performance.

Some questions remain without answers sharp: Is it illusory to engage in practices societally responsible that will only increase the burdens of the firm in a calling environment the control of costs?

If the answer is negative, is there then a positive impact of CSR on the financial performance of the latter?

The present article proposes to provide elements of response to the last question by adopting a methodology hypothetico-deductive method.

In a first time, there will be question of dealing with the main currents theoretical devoted to the study of the impact of CSR on financial performance, while making a synthesis of the results of major empirical research dealing with the issues in question. In a second time, it will be studied the impact of CSR on the financial performance of companies and this from a sample of 20 companies listed on the stock exchange securities of Casablanca, on the period: 2007–2010, or the different results obtained will be discussed and analysed.

2 The CSR and financial performance: between theoretical models and divergent empirical results inconclusive

2.1 The CSR and financial performance: the inputs of the models and liberal societal

2.1.1 The models of the negative impact of CSR on financial performance

These models suggest that the commitment in social practices or for environmental protection negatively influences the financial performance of the company. Two models can be distinguished.
The first model, famous liberal, is initiated by Friedman (1970). This author considers that taking into account the principles of CSR generates costs for the company and reduces its competitiveness. Friedman (1970) gives the example of the firm which refrains to increase the price of his product in the laudable goal of does not cause inflation, in spite of the fact that this increase would benefit the latter. The author also proposes the example of the company that spends money to reduce pollution beyond what is needed, or even when it adopted a policy of mass recruitment, in spite of the absence of need for human resources, and this in the objective to contribute to the reduction of unemployment.

To Friedman (1970), these actions constitute only an expenditure of money which returns to the shareholders and that the company has the sole responsibility to use its resources in activities generators of wealth. CSR is only an alternative to the mechanism of the market, only to ensure the optimal allocation of resources.

The second model is the work of Preston and O’Bannon (1997), who consider that the expenditure in the protection of the environment or in social activities can be used by managers as a pretext to justify the excesses of costs due to bad management.

Unlike the liberal model, other authors have forged a model which explains the benefits of CSR on the financial performance of the company.

### 2.1.2 The social models and the elucidation of the positive association between CSR and financial performance

The theoretical models that assume the existence of a positive impact of CSR on financial performance emanate from the theory of stakeholders and are the number of two models. The first door which the model name of the social influence (social impact hypothesis) is initiated by Freeman (1984), Carroll (1979) and Cornell and Shapiro (1987). These authors consider that the financial performance of the company past by a good image with all its stakeholders, which can be done only by taking into account their expectations.

The second model, entitled: model of the organisational surplus, is defended by, among others, McGuire et al. (1988). This author considers that it is the financial performance which determines the engagement in socially responsible practices.

### 2.1.3 The neutrality of the CSR on financial performance

According to the supporters of this model (McWilliams and Siegel, 2001; Hing, 2003; Preston and O’Bannon, 1997), the profits generated by the adoption of an approach socially responsible, are offset by the costs it entails. On the one hand, McWilliams and Siegel (2001), depart from a model of supply and demand for social responsibility. The offer comes from businesses and takes the form of commitments, in the short term, to meet the expectations of the stakeholders. The request comes from the stakeholders in the life of the company. Thus, the confrontation between the supply and demand led, at the equilibrium, to a mutual compensation between the profits and costs of CSR. According to these authors, the model thus developed, allows to explain the results of the empirical studies that conclude in the absence of any association between the financial performance and the CSR.
2.2 The CSR and financial performance: empirical studies to the results often dissidents

The different theoretical models that have studied the nature of the impact of CSR on financial performance have opened the way for several empirical studies which have given rise to the results, at least say, mixed. The divergence of results obtained testifies on the one hand, of the complexity of the associations between the two concepts that can only partially be picked up by a few indicators, on the other hand, the impact of the context of the completion of the study.

2.2.1 The concept of CSR

To operationalise the concept of CSR, the empirical studies have adopted different approaches which the analysis of the contents of the annual reports was among the most coveted. This method is to assess, via a grid of notation, the degree of communication of societal information. The indicators of reputation communicated by the credit rating agencies have been used in several studies to measure the degree of the involvement of societal firms (Igalens et al., 2008; Griffin and Mahon, 1997; Graves and Waddock, 1994). These indices, have been widely employed in empirical studies dealing with the association between CSR and financial performance. However these measures are not based in theory (Allouche and Laroche, 2005).

Other studies have concentrated on measures from surveys by questionnaire which allow you to operationalise, by items of measurement, the three dimensions of CSR. In this category we can include measures that operationalise the Carroll (1979) model (Aupperle et al., 1985; Zeribi-Benslimane and de Boussoura, 2007).

2.2.2 The measurement of the financial performance

Two categories of measurement of financial performance are used in the studies which involve in the CSR. The measures of accounting nature and the measures of stock market nature. As accounting measures we include the return on assets (McGuire et al., 1988; Graves and Waddock, 1994; Griffin and Mahon, 1997; Preston and O’Bannon, 1997), the return on equity (Graves and Waddock, 1994; Griffin and Mahon, 1997; Preston and O’Bannon, 1997), and the trade performance (Graves and Waddock, 1994; McGuire et al., 1988; Griffin and Mahon, 1997; Preston and O’Bannon, 1997; Seifert et al., 2003). The main stock market measures used are: the ratio of Marris, the price earning ratio (Pava and Krausz, 1996), and the total return to shareholders (McGuire et al., 1988; Alexander and Buchholdz, 1978).

The accounting measures have the merit of highlighting the level of economic performance, however they may be the object of a manipulation by the leaders. The stock market measures are less prone to the managerial discretion, nevertheless they reflect only the subjective assessment of investors, particularly as they do not highlight faithful manner, the economic reality of the firm (Allouche and Laroche, 2005).
3 The CSR and financial performance: research hypothesis, methodology and results

This research examines the impact of the RES on the financial performance in the context of an emerging country. Taking into account the institutional characteristics of the Moroccan context characterised by a speech more and more strong on the need for the involvement of firms in the process of sustainable development, this country offers a conducive framework for the consideration of such a problematic.

3.1 Assumptions of the search

3.1.1 Relationship between CSR and financial performance

Based on the liberal model, Friedman (1970) considers that the CSR induces costs which reduce the competitiveness of the firm which adversely affects its value. By against the current partnership which was inspired by the stakeholders theory, apprehended CSR as an outcome in favour of the improvement of the image of the company to its stakeholders, which might be reflected positively on its financial performance (Freeman, 1984; Graves and Waddock, 1994; Alexander and Buchholz, 1998).

The social commitment of the company can have a positive influence on its financial performance, particularly when it is measured by the stock market indicators, when the latter evolved in a financial market efficient (the course quickly integrates all of the information relative to the publicly traded company) and if the investors are positively sensitive to efforts made by the firm in respect of corporate responsibility.

In Morocco, the ownership of listed companies is concentrated, which chalk of course a problem of non-liquidity of the securities, which leads to a lower efficiency. In addition, the Moroccan investor seeks first the maximisation of the value of his savings (Bakir, 2004). In effect in a context similar to that of Morocco, Zeribi-Benslimane Olfa (2007) found that the CSR measured by measurement scales based on the Carroll model has no significant impact on the financial performance measured by stock market indicators from a sample of companies listed on the stock exchange securities of Tunis.

Thus our first hypothesis predicts the absence of a significant impact of CSR on financial performance.

H1 The CSR has no significant impact on the financial performance measured by ratios fellows in the context of a financial market are emerging.

3.1.2 The relationship between CSR and the size of the company

The size of the firm influence its degree of commitment in the CSR. In effect, Graves and Waddock (1994) consider that large entities, to share their relations with a multitude of stakeholders, and their high sensitivity to the media, are more eager to reflect a good image. The large size of the company may be a proxy for the importance of its financial resources to carry out a mode of responsible management. In addition, the size is often regarded as a factor influencing the financial performance of the company measured by stock market indicators (Demsetz and Villalonga, 2001; Charreaux, 1991). The direction of the relationship between the size of the company and its performance, has not been the subject of a consensus between the authors.
Therefore we can assume that the large companies, which are the more, the subject of media attention, are the most prone to adopt a mode of responsible management and from whom, the CSR has more influence on financial performance.

H2 The impact of CSR on financial performance is stronger for large firms.

3.2 Methodology

3.2.1 Variables studied and specification of econometric models

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Operationalisation variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong>¹</td>
<td><strong>Description of variables</strong></td>
</tr>
<tr>
<td>QT: Tobin’s Q</td>
<td>Relation between (the market capitalisation of the company + the book value of its debts) and of the accounting value of assets</td>
</tr>
<tr>
<td>MR: The ratio of Marris</td>
<td>Relation between the market capitalisation of the company and the book value of its own capital</td>
</tr>
<tr>
<td>ROE1: profitability of own capital (return on equity)</td>
<td>Ratio between the net income and equity</td>
</tr>
<tr>
<td>ROA: Return on assets (return on assets)</td>
<td>Ratio between the gross operating surplus and the net assets</td>
</tr>
<tr>
<td><strong>Explanatory variable</strong></td>
<td>CSR: Corporate social responsibility²</td>
</tr>
<tr>
<td></td>
<td>Dichotomous variable that takes the value 1 if the firm holds the label issued by the MEGC, and 0 if it is not labelised</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td>Size: size of the firm</td>
</tr>
<tr>
<td></td>
<td>The logarithm of the market capitalisation of the company</td>
</tr>
<tr>
<td>Risk: the risk linked to the activity of the firm</td>
<td>Standard deviation of the daily return of the action of the company over a period of one year (by not taking into account that the working days on the stock exchange)</td>
</tr>
<tr>
<td>LF: The financial lever</td>
<td>Report between the debts long and medium term and the own capital</td>
</tr>
</tbody>
</table>

Notes: ¹In this research, the financial performance is measured by stock market indicators and accounting. The choice of certain stock market indicators is justified by the nature of the sample composed only of companies listed on a stock exchange. Furthermore we believe that the accounting indicators can play a complementary role to the extent or the inefficiency of the financial market Moroccan may be a brake which limits the sensitivity of stock market indicators to business behaviour in the field of CSR. ²The choice of this measure of CSR is justified by several reasons. On the one hand, we regret the absence, in Morocco, of rating agencies the CSR. In addition, the label of the MEGC which sanctioned the social commitment, is issued only to those firms who have met certain basic conditions in terms of CSR, especially as they are submitted periodically to compliance audits. Thus we believe that the detention of a label of CSR of the MEGC demonstrates a real commitment of the company labelled in the field of corporate social responsibility.
3.2.1.1 Specification of econometric models

The equations of the models which reflect the impact of CSR on financial performance are as follows:

1. Impact of CSR on financial performance measured by stock market indicators:
   - equation (1): model of the stock market performance 1
     \[ Q_{it} = \alpha_0 + \alpha_1 \text{CSR}_it + \alpha_2 \text{size}_it + \alpha_3 \text{Risk}_it + \alpha_4 \text{LF}_it + \epsilon_{it} \]
   - equation (2): model of the stock market performance 2
     \[ MR_{it} = \beta_0 + \beta_1 \text{CSR}_it + \beta_2 \text{size}_it + \beta_3 \text{Risk}_it + \beta_4 \text{LF}_it + \epsilon_{it} \]
   - equation (3): model of the accounting performance 1

2. Impact of CSR on financial performance measured by indicators of accounting:
   - equation (4): model of the accounting performance 2
     \[ \text{ROE}_1it = \gamma_0 + \gamma_1 \text{CSR}_it + \gamma_2 \text{size}_it + \gamma_3 \text{Risk}_it + \gamma_4 \text{LF}_it + \epsilon_{it} \]
     \[ \text{ROA}_1it = \delta_0 + \delta_1 \text{CSR}_it + \delta_2 \text{size}_it + \delta_3 \text{Risk}_it + \delta_4 \text{LF}_it + \epsilon_{it} \]

3.2.2 Sample and data source

3.2.2.1 Sample

The study is carried out on the basis of a sample of 20 companies listed on the stock exchange securities of Casablanca on the period 2007–2010. Thus, we have 20 * 4 = 80 comments business-year. Among the 20 companies studied, 4 hold the label of the CSR issued by the MEGC.

3.2.2.2 Source of data

The data relating to CSR have been collected from the information sheet on companies with label communicated by the MEGC.

The information needed to measure the variables: performance, size, the risk, and the financial lever, are collected from the states of synthesis, of the annual reports and the historical stock prices of the shares of each listed company.

4 Analysis of the results and discuss

4.1 The control of the heterogeneity unobserved inflow and the real impact of CSR on financial performance

We appreciate the impact of CSR on financial performance by using two groups of econometric models (Hisiao, 2003).
Table 2

Econometric models of the impact of CSR on financial performance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QT</td>
<td>MR</td>
<td>ROE</td>
</tr>
<tr>
<td>ROA</td>
<td>ROE</td>
<td>ROA</td>
</tr>
</tbody>
</table>

**Dependent variable**

<table>
<thead>
<tr>
<th></th>
<th>QT</th>
<th>MR</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>–12.7499</td>
<td>–17.51</td>
<td>–0.827</td>
<td>–0.848</td>
</tr>
<tr>
<td></td>
<td>(–8.769***</td>
<td>(7.68)**</td>
<td>(–3.8)**</td>
<td>(–4.3)**</td>
</tr>
<tr>
<td>CSR</td>
<td>0.232573</td>
<td>0.79596</td>
<td>0.01052</td>
<td>0.01429</td>
</tr>
<tr>
<td></td>
<td>(0.94489</td>
<td>(2.06)**</td>
<td>(0.2871)</td>
<td>(0.4286)</td>
</tr>
</tbody>
</table>

**Exogenous variable**

<table>
<thead>
<tr>
<th></th>
<th>QT</th>
<th>MR</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>1.514052</td>
<td>2.19607</td>
<td>0.11195</td>
<td>0.1127</td>
</tr>
<tr>
<td></td>
<td>(11.79)**</td>
<td>(10.9)**</td>
<td>(5.85)**</td>
<td>(6.48)**</td>
</tr>
<tr>
<td>Risk</td>
<td>0.033590</td>
<td>0.05167</td>
<td>–0.00595</td>
<td>–0.2308</td>
</tr>
<tr>
<td></td>
<td>(0.16425</td>
<td>(0.1613)</td>
<td>(–0.195)</td>
<td>(–0.833)</td>
</tr>
<tr>
<td>LF</td>
<td>–0.090680</td>
<td>–0.11071</td>
<td>–0.08926</td>
<td>–0.06038</td>
</tr>
<tr>
<td></td>
<td>(–0.38892</td>
<td>(–0.3031)</td>
<td>(–2.57)**</td>
<td>(–1.911)*</td>
</tr>
</tbody>
</table>

**Control variables**

<table>
<thead>
<tr>
<th>Type of econometric model</th>
<th>Fischer</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models on data stacked</td>
<td>49,161***</td>
<td>0.723904</td>
</tr>
<tr>
<td>(modelling not taking into account the individual heterogeneity unobservable of each company)</td>
<td>44.3***</td>
<td>0.70261</td>
</tr>
<tr>
<td>Models to individual effects and temporal fixed</td>
<td>14.37***</td>
<td>0.43392</td>
</tr>
<tr>
<td>Effects model individual effects and temporal fixed</td>
<td>18.15***</td>
<td>0.49196</td>
</tr>
<tr>
<td>Effects model individual temporal fixed</td>
<td>69.98570***</td>
<td>0.971698</td>
</tr>
<tr>
<td>Effects model individual random</td>
<td>428.4110***</td>
<td>0.995264</td>
</tr>
<tr>
<td>Effects model individual random</td>
<td>3.937722***</td>
<td>0.332440</td>
</tr>
<tr>
<td>Fisher effects model</td>
<td>9.32563***</td>
<td>0.332162</td>
</tr>
<tr>
<td>Specifying the threshold of 5% at the 1% threshold. *Significant at the threshold of 10%. **Significant at the threshold of 5%. ***Significant at the 1% threshold.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first group allows the regression of stock market measures of financial performance (QT and MR) on CSR while monitoring the effect of variables LF, risk and size. The second group of models allows to disentangle the impact of CSR on financial performance measured by the indicators accountants: ROE1 and ROA.

When the specification of the models is done on the data stacked (without taking account of the heterogeneity unobservable of businesses), we find that, in accordance with the results of the descriptive analysis, the CSR positively influences the financial performance. However the control of this heterogeneity enables you to assess the real impact of CSR on financial performance (Sevestre, 2002).

Thus we note that the CSR influence negatively and significantly the financial performance measured by the four measures. Thus for example, the detention of a label of CSR, reduced on average the performance measured by the QT of 20%.

The size retains its positive and significant impact on all measures of financial performance. The risk influence positively but not significantly the financial performance, and the financial lever has a negative impact and statistically significant on all the measures of the financial performance deductions with the exception of the QT toolkit.

4.2 Discussion


The negative impact of the social commitment of the firm on its stock market performance is proved that when the latter is large in size. Thus the size to a moderating effect in the relationship between CSR and financial performance. This result comes to confirm those obtained in studies of Graves and Waddock (1994), Verschoor (1988), Simpson and Kohers (2002), Zeribi-Benslimane and Boussourra (2007) and Cardebat Sirven (2010).

CSR has a negative effect on the performance of the exploitation activities. In effect, companies which have a privileged societal approach are penalised and emit a profitability of assets and equity capital less than the other companies. Possibly, the CSR pushes the company to engage in investment generating costs that reduce the profitability.

Thus, we can reject the hypothesis H1 which predicts the neutrality of CSR on financial performance and accept the hypothesis H2 which suggested a more important impact of CSR on financial performance in large firms.

In an emerging country, the social commitment of the company must be the subject of a long-term investment. In effect, the objectives in expected in terms of value creation for the shareholder, are not reached in the first years of its begun. It is possible to assume in addition that in emerging countries, the CSR is merely an effect of mode, in the expectation of a process of institutionalisation, and/or of an awareness by the general public, the stakes in such a commitment.
5 Conclusions

The acerbite competition pushes the company to confine the maximisation of the wealth, the preservation of the interests of stakeholders, and the protection of the natural environment. This purpose strong commendable is supposed by the supporters of the current partnership as a new outcome for the reconciliation of the large business with its environment in order to improve the value. However, a real social commitment of the company is not without costs, which can sometimes be a brake in the face of value creation. From this angle of saw, the supporters of the current liberal, fervently contested the idea of CSR regarded as a defamation of the ultimate purpose of the creation of the value, without which, there would not even of businesses.

Apart from the dissensions between supporters of the benefits of CSR and those who shall bring into focus its faintness, it has begun to be adopted by several companies everywhere than the world and it is more than a simple effect of mode in Morocco.

Countries or economic development depends on the involvement of all the components of the civilian population, the companies are more than ever called upon to demonstrate a real commitment in the effort of this development. If today the interest on the SMES, the large company has always remains a major actor in the economic fabric Moroccan. Therefore, if the objective is to anchor the CSR in the management practices of the leaders of our SMES, it is probably more appropriate to start with the managers of large boxes. On the other hand, for the large company agreed to integrate such a philosophy, foreign to the principle of maximisation of shareholder value, it is may be more appropriate to highlight its benefits. This questioning was the anchor of this work which has sought to clarify the impact of CSR on financial performance, from a panel of companies listed on the stock exchange securities of Casablanca.

In considering that the firms studied have the same specific characteristics, we have found that those who demonstrate a commitment societalemen t responsible, performing, yet that little, the other companies. However when we control the specificities of each individual company, which are of nature not observable and that influence the financial performance, we have leads to the observation that the social commitment does that deteriorate the financial performance. In this sense the companies that are making efforts in the areas of social welfare and the protection of the environment, achieve operating results lower than the other companies, the consequent negative effects on the value of their shares on the stock exchange. This result can be considered as robust in the light of the negative impact of CSR on the performance measured by several indicators.

Large size firms having opted for the CSR, seem more sensitive to its negative impacts on financial performance. The size is therefore a factor of mediation in the relationship between CSR and financial performance. Of this fact, a societal commitment of the business is of the long-term investment. Indeed, the objectives in discounts, consisting of an improvement of the economic performance, must not be expected from the first years of the beginning of an approach to CSR.

Like any other work of research, the present study is marred by a few limitations.

Concerning the choice of explanatory variables, we would have liked to incorporate other variables that can influence the financial performance such as research and development spending, the influence sectoral or even the distribution of dividends. In addition, the fault of measurement of CSR has forced us to consider this as an indicator variable which depends on the detention of the company of the label of the MEGC. In
this sense it is possible that the labelling does not accurately reflect the social commitment of the company.

The sample size reduced, and the low number of periods of study, does not allow a better control of specific effects and makes the only random effects models, generalisable on listed companies to the BVMC.

References
Corporate social responsibility and financial performance


Notes

1 The founding fathers of the concept of CSR are Penrose (1959) and Carroll (1970). These two researchers have attempted to reconcile the traditional objective of maximisation of profit to the objectives of the compliance of the social conditions of labour, of business ethics and the protection of the environment.

2 The corporate-executive would be spending someone else’s money for a general social interest. In so far “as his actions in accord with his “social responsibility” reduce returns to stockholders, he is spending their money” (Friedman, 1970).

3 For example the index of the Fortune magazine which provided an annual ranking of the ten best companies in the field of CSR.

4 When we considered the different models without the integration of the variable, size of the business, the CSR variable spring non-significant after the specification.